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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,844	07/14/2003	Wolfgang Zinser	102063.56891US	8802
23911	7590	08/30/2006	EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			GONZALEZ, JULIO C	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/620,844	Applicant(s) ZINSER ET AL.	
	Examiner Julio C. Gonzalez	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 10-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received. ✓

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) * | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) -
Paper No(s)/Mail Date <u>12/23/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (claims 1 – 9) in the reply filed on 07/14/06 is acknowledged.

Drawings

2. The drawings are objected to because such drawings are inconsistent with the claim subject matter disclosed in claim 9. Claim 9 discloses that the high voltage winding is inside the low voltage winding, yet the specifications in page 4, lines 8, 9 and figure 2 disclose that the low voltage winding 9 inside the high voltage winding 10 (opposite of claim 9). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 3, 6 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zinser (US 6,534,208) in view of Daikoku et al (US 6,737,778).

Zinser discloses a system for generation of electrical energy having a fuel cell 1, compressor 5 coupled to fuel cell 1, a drive unit having motors 15, 16 and each motor having stator windings 27, 20 and battery 24 providing power to one of the motors (see figure 1).

Moreover, voltage converters 27, 28 are coupled to motors 16, 15. It is further disclosed that the winding of motor 15 are used for a lower voltage than the windings of motor 16 (column 6, lines 16 – 18). Thus the system provides windings for a low voltage and windings for high voltage.

However, Zinser does not disclose explicitly that the motors are permanent magnet motors.

On the other hand, Daikoku et al discloses for the purpose of reducing torque ripples in electrical machines, a first motor 3, second motor 4 and each motor having permanent magnets 3e, 4e and both motors 3, 4 sharing a common rotor 5 (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a system as disclosed by Zinser and to modify the invention by using permanent magnet motors for the purpose of reducing torque ripples in electrical machines as disclosed by Daikoku et al.

5. Claims 4, 5, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zinser and Daikoku et al as applied to claims 1, 8 above, and further in view of Denk (US 5,304,883).

The combined system discloses all of the elements above. However, the combined system does not disclose that high voltage winding are positioned concentrically inside a low voltage winding.

On the other hand, Denk discloses for the purpose of increasing the magnetic flux density, thus increasing the performance of electrical machines that a high current winding 32 is concentrically inside a low current winding 34 (see figure 2; column 2, lines 16 – 19). Denk teaches inherently that such winding 32 is a high voltage winding since it discloses that winding 32 is a high current conductor and according to Ohm's Law ($I = V/R$), if there is a high current, a high voltage must be present. The same applies to low voltage winding 34.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to provide an electrical machine with a high voltage winding inside a low voltage winding for the purpose of increasing the magnetic flux density, thus increasing the performance of electrical machines as taught by Denk.

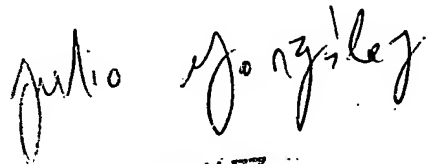
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is 571-272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jcg
August 28, 2006


JULIO GONZALEZ
PATENT EXAMINER